

glutaminyl-tRNA synthase (glutamine-hydrolysing)

Cat. No. EXWM-5810

Lot. No. (See product label)

Introduction

- DescriptionIn systems lacking discernible glutamine-tRNA ligase (EC 6.1.1.18), glutaminyl-tRNAGIn is formed by a
two-enzyme system. In the first step, a nondiscriminating ligase (EC 6.1.1.24, glutamate-tRNAGIn ligase)
mischarges tRNAGIn with glutamate, forming glutamyl-tRNAGIn. The glutamyl-tRNAGIn is not used in
protein synthesis until the present enzyme converts it into glutaminyl-tRNAGIn (glutamyl-tRNAGIu is not a
substrate for this reaction). Ammonia or asparagine can substitute for the preferred substrate glutamine.
- *Synonyms* Glu-AdT; Glu-tRNAGIn amidotransferase; glutamyl-tRNAGIn amidotransferase; Glu-tRNAGIn:L-glutamine amido-ligase (ADP-forming)

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 6.3.5.7
CAS No.	52232-48-1
Reaction	ATP + L-glutamyl-tRNAGIn + L-glutamine = ADP + phosphate + L-glutaminyl-tRNAGIn + L-glutamate
Notes	This item requires custom production and lead time is between 5-9 weeks. We can custom produce according to your specifications.

Storage and Shipping Information

Storage Store it at +4 °C for short term. For long term storage, store it at -20 °C~-80 °C.